AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of ~~treating~~ reducing motorneuron loss associated with amyotrophic lateral sclerosis (ALS) in a subject ~~suffering from or susceptible to a disease or disorder associated with neurodegeneration~~, the method comprising ~~the step of~~ administering to the subject for a time period exceeding three weeks a therapeutic amount of ~~a beta-lactam compound~~ ceftriaxone or a salt thereof which is sufficient to reduce motorneuron loss ~~treat the disease or disorder or symptoms thereof associated with neurodegeneration under conditions such that the disease or disorder associated with neurodegeneration is treated, but which does not result in substantial clinically effective antibiotic activity~~.

2. (Original) The method of claim 1, wherein the subject is a human.

3. (Original) The method of claim 1, wherein the subject is a subject identified as being in need of such treatment.

4. (Original) The method of claim 1, wherein the subject is not suffering from a bacterial infection.

5. (Currently amended) The method of claim 1, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the beta-lactam compound for a period of time greater than 2 weeks.

6. (Currently amended) The method of claim 1, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ for a period of at least ~~about~~ 6 months.

7. (Currently amended) The method of claim 1, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ in a dosage of less than ~~about~~ 500 mg/day.

8. (Cancelled)

9. (Currently amended) The method of claim 1, wherein the average plasma concentration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ in the subject does not exceed ~~about~~ 10 micrograms per milliliter.

10 – 11. (Cancelled)

12. (Currently amended) The method of ~~claim 10~~ claim 1, wherein the ceftriaxone or salt thereof ~~beta-lactam compound~~ is ceftriaxone sodium.

13. (Currently amended) The method of ~~claim 11~~ claim 1, wherein the ceftriaxone or salt thereof ~~beta-lactam compound~~ is ceftriaxone disodium salt, sesquaterhydrate.

14. (Original) The method of claim 1, wherein EAAT2 protein expression is increased *in vivo*.

15. (Original) The method of claim 14, wherein EAAT2 production is increased by 200% or more relative to non-regulated production.

16. (Cancelled)

17. (Currently amended) The method of claim 1, wherein the step of administering comprises administering the ceftriaxone or salt thereof ~~compound~~ intravenously or intramuscularly.

18. (Currently amended) A kit comprising an effective neuroprotective amount of ceftriaxone or salt thereof ~~a beta-lactam compound~~ in unit dosage form, together with instructions for administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ to a subject suffering from ALS ~~or susceptible to a disease or disorder or symptoms thereof associated with neurodegeneration~~, wherein the effective neuroprotective amount of ceftriaxone or salt thereof~~a beta-lactam compound~~

is an amount which reduces motorneuron loss by ALS ~~does not result in substantial clinically effective antibiotic activity~~.

19 - 20. (Cancelled)

21. (Original) The method of claim 1, further comprising determining a level of EAAT expression in the subject.

22. (Currently amended) The method of claim 21, wherein the determining of the level of EAAT expression is performed prior to administration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject.

23. (Currently amended) The method of claim 21, wherein the determining of the level of EAAT expression is performed subsequent to administration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject.

24. (Currently amended) The method of claim 21, wherein the determining of the level of EAAT expression is performed prior to and subsequent to administration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject.

25. (Currently amended) The method of claim 24, wherein the levels of EAAT expression preformed prior to and subsequent to administration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject are compared.

26. (Original) The method of claim 25, wherein the comparison of EAAT levels is reported by a clinic, laboratory, or hospital agent to a health care professional.

27. (Currently amended) The method of claim 24, wherein the level of EAAT expression preformed prior to administration of the ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject is lower than the level of EAAT expression preformed subsequent to administration of the

ceftriaxone or salt thereof ~~beta-lactam compound~~ to the subject, then the amount of ceftriaxone or salt thereof~~compound~~ administered to the subject is an effective amount.

28. (Currently amended) The method of claim 7, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ in a dosage of less than ~~about~~ 25 mg/day.

29. (Currently amended) The method of claim 28, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ in a dosage of less than ~~about~~ 100 mg/day.

30. (Currently amended) The method of claim 29, wherein the step of administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ comprises administering the ceftriaxone or salt thereof ~~beta-lactam compound~~ in a dosage of less than ~~about~~ 50 mg/day.

31. (Currently amended) The method according to claim 1 wherein the ceftriaxone or salt thereof ~~beta-lactam compound~~ is administered in combination with at least one other pharmacological agent.

32. (Previously presented) The method according to claim 31, wherein the at least one other pharmacological agent is a non-steroidal anti-inflammatory compound; riluzole; levodopa; a dopa agonist; an acetylcholinesterase inhibitor; an NMDA receptor blocker; gabapentin; amytriptyline; or an interferon.

33. (Withdrawn) The method according to claim 32, wherein the non-steroidal anti-inflammatory compound is aspirin, naproxen, sulindac, diclofenac, ibuprofen, celecoxib or valdecoxib.

34. (Withdrawn) The method according to claim 32, wherein the NMDA receptor blocker is memantine.

35. (Cancelled)

36. (Currently amended) A kit according to claim 18, wherein the amount of ceftriaxone or salt thereof ~~beta-lactam compound~~ in unit dosage form is less than 250 mg.